

# DEFINITIONS AND GLOSSARY OF TERMS

## Safe Patient Handling and Mobility (SPHM)

### Patient Assessment/Algorithms/Scoring System

**Air assisted lateral transfer device:** A patient transfer mattress that utilizes the force of air to decrease friction and result in ease in movement of patients (in a supine position) from one flat surface to another. It also decreases shear forces on the skin of patients during these lateral transfers.



**Air assisted lifting device:** There are a few unique devices in this category. All use the force of air to raise the patient. One has several mattress chambers that are inflated. As each chamber inflates, the patient is finally raised to a level where they can be laterally transferred onto a flat surface such as a stretcher. Another design brings the patient into a seated position, facilitating standing.



**Algorithm:** A flow chart/decision tree that asks specific questions related to patient medical, physical, and cognitive characteristics that guides the caregiver to determine the technology of choice, number of required caregivers, and level of patient assistance for the proposed patient movement/task.

**Ambulate:** To walk from place to place with or without assistance.

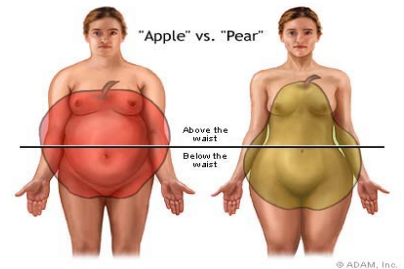
**Ambulation sling:** These are used with lifting equipment in order to provide support and safety for a patient who is undergoing ambulation rehabilitation and provide protection for staff from patient weakness/falls. These slings have a wide range of designs intended to support chest, thighs, and/or pannus while a patient is ambulating. Some designs or patient conditions may require the use of protective undergarments.

**Bariatric patient:** In relation to patient handling, a person whose body weight, body weight distribution, or size interferes with the ability to provide reasonable and safe care. There are many definitions and include persons overweight by greater than 100 pounds, or with a body weight greater than 300 pounds, or, more commonly, with a body mass index (BMI) greater than 40. Some bariatric experts use a BMI of 30 as an indicator for assistive technology.

#### **Bariatric shapes (weight distribution)**

**Apple shaped:** Refers to central obesity where excessive adipose tissue is located in the viscera or abdominal area.

**Pear shaped:** Excessive adipose tissue is primarily located in the gluteal-femoral region of the body. Pear-shaped persons can move fairly easily and can get from sitting to standing as they can push their center of mass over their legs.



**Bed features/Bed-assisted technology:** Beds that have additional functions than support. Some frames are able to adjust to the Trendelenburg position to facilitate moving a patient up to the head of the bed. Some have air bladders that fill and empty to laterally rotate the patient. Others assist in SPHM tasks such as repositioning, transportation, percussion, bringing patients to sitting positions, and others.



**Body Mass Index (BMI):** The most common and recognized method to predict morbidity and mortality based on a numeric value reached by dividing the person's weight by height in meters squared. Preferred use is in clinical determinations as opposed to use as patient handling criteria.

BMI Classification	Underweight	Normal weight	Overweight	Obese	Morbid Obesity
	Less than 18.5	18.5 – 24.9	25 – 29.9	30 – 39.9	Greater than 40

BMI Calculator. [http://www.nhlbi.nih.gov/health/educational/lose\\_wt/BMI/bmicalc.htm](http://www.nhlbi.nih.gov/health/educational/lose_wt/BMI/bmicalc.htm)

**Caregiver:** For purposes of this document, caregiver is the term used for healthcare worker, provider, worker, and refers to any licensed or unlicensed person who provides direct patient care, including the moving and handling of patients. Caregivers who comprise the patient care team represent a variety of clinical disciplines and educational levels and may work in long-term care, acute care, home-based care, dental, radiology/diagnostics, therapies, and any other patient care areas.

**Ceiling Lift:** A type of Overhead Lift designed for patients who require moderate to maximum/extensive assistance. With this type of lift, the motor that lifts the patient is attached to a track or rail suspended from the ceiling.

Example: Ceiling lift over bed through bathroom door over toilet, in shower and back to bed in one single move. (Complements :Loma Linda VA HCS)



**Chair repositioning features:** Chairs with these features can recline or prevent slippage.

**Destination Surface:** The surface that a patient is moved to. If moving from bed to stretcher or wheelchair to commode, the stretcher and commode are the destination surfaces.

**Ergonomics:** The scientific study of the relationship between work being performed, the physical environment where the work is performed, the unique characteristics of the individual performing the work, and the tools used to help perform the work. The goal of ergonomics is to provide a workplace that is designed to ensure the biomechanical, physiological, and psychosocial limits of people are not exceeded thus risk of musculoskeletal injuries is diminished.

**Expanded/Extended capacity:** Devices, equipment, supplies, furniture and technology designed to accommodate a patient whose weight, weight distribution and/or size interferes with use of standard sized devices, furniture, etc.

**Friction:** The resistance to motion between two materials in contact (e.g., bed sheet and skin tissue).

**Friction reducing device (FRD):** Devices made of slippery materials designed to reduce friction during sliding movements. This technology creates a safer environment to move a patient, reposition him in a bed/chair or for sling placement.



**Full Body Lifting Device (Floor Lift/Floor-based Lift):** Lifting equipment used for patients who are dependent, or who require moderate/maximum or extensive assistance. This style of lift has a wheeled base that rolls on the floor and can be moved from room

to room or area to area. The lift motor functions to raise or lower the patient but caregivers must manually push the lift and patient to the desired location. New design are motorized so the caregiver just needs to guide the equipment.



**Gait/Transfer Belt:** NOT for use in the lifting, handling, and movement of patients. When used in these activities, the caregiver is essentially performing manual patient handling. More preferred ambulation assistive devices are standing lifts with ambulation capacity or overhead lifts with ambulation slings. When used, a gait belt is situated around the waist of a patient and aids/guides in ambulation of patients by physical therapy staff.

**Gantry lift:** A type of Overhead Lift used for patients who are dependent or who require moderate to maximum/extensive assistance. This type of lift is placed over the bed of a patient and functions similarly to an overhead/ceiling lift. This can be an option if a fixed ceiling- or wall-mounted lift is not feasible. This device does not penetrate a wall or ceiling.



**Healthcare Giver:** See Caregiver.

**Height-adjustable exam table:** Exam table that can be positioned to a very low level to facilitate transfer from a wheelchair onto the table and then raised to an appropriate height for medical care, procedures, examinations.

**High risk patient handling tasks:** Patient handling tasks that have a high risk of musculoskeletal injury for caregivers performing the tasks. These include but are not limited to transferring tasks, lifting tasks, ambulation, rehabilitation therapy, repositioning tasks, bathing patients in bed, making occupied beds, ambulating patients, dressing patients, turning patients in bed, tasks with long durations, standing for long periods of time, bariatric, and other patient handling tasks. Activities that require lifting 35 pounds or more of patient weight are high risk. All patient handling, movement and mobility tasks involving bariatric patients are considered high risk.

**Independent transfer:** Patients who have the capability to move themselves from one location to another without caregiver or technology assistance or who can move themselves with minimal technology assistance using personal assistive devices perform independent transfers.

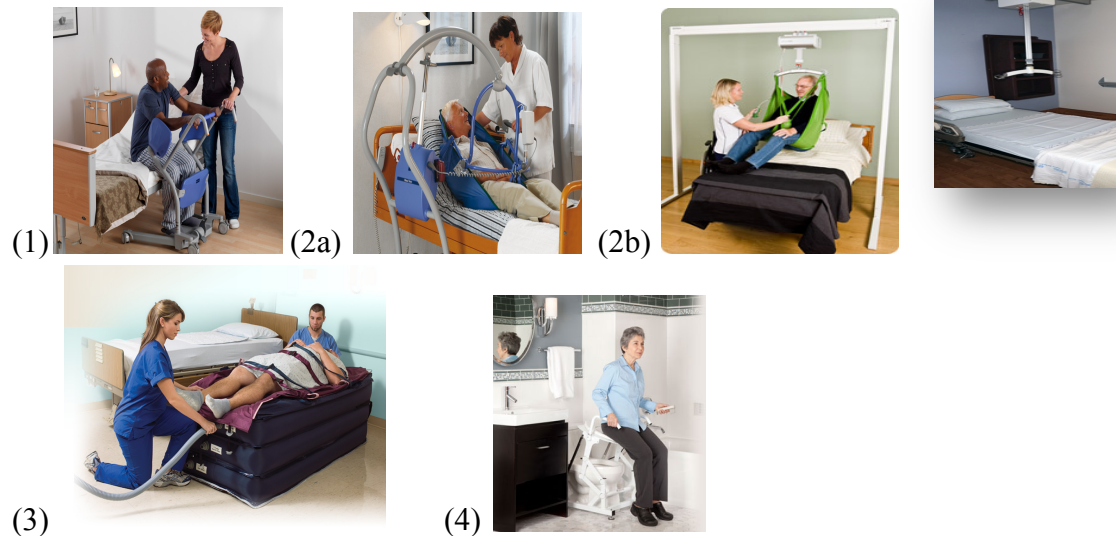
**Lateral transfer device:** A device designed to assist in the horizontal movement of a patient in a supine position from one flat surface to another, for example, from a bed to a stretcher or bathing trolley. There are many types but the most common are air-assisted or are made of a slippery materials that aid in sliding.



**Lifting technology:** Mechanical or non-mechanical equipment or devices used to assist caregivers in performing patient handling tasks, including lifting, transferring, wound care, ambulation, catheterization and others. The following are major categories of lifting technology: (1) Powered or non-powered sit-to-stand lifts; (2) Powered full body lifting devices. This category is further broken down to those that are (a) floor-based and those that



are (b) overhead lifts (including ceiling-mounted, wall-mounted, and gantry lifts; (3) air assisted lifting devices; and (4) powered toilet lift seats.



**Manual patient handling:** Unsafe lifting, transferring, repositioning, mobilizing, moving patients, or otherwise caring for a patient without mechanical assistance when required, i.e., when lifting more than 35 pounds of body weight (under the best of circumstances – no tubes, lines, contractures, dementia, etc.).

**Mechanical lateral transfer devices:** Specially designed technology that is powered by an electric motor or manual crank, the device attaches to a draw sheet or something similar and moves the patient from one horizontal surface to another.



**Mobility Aids:** These items assist patients to ambulate more independently than without them. They include walkers, canes, crutches.

**Mobilize:** Moving (including positioning in bed, ambulating) the patient either with assistance or independently with the aim of preventing immobility-related consequences of care.

**Motorized bed, stretcher, wheelchair, transport chair:** These equipment have a motorization component that causes the bed, etc. to move without use of force or pushing by the caregiver. They allow the caregiver to simply direct the movement.

**Motorized bed mover and wheelchair mover:** Usually battery-powered devices that attach to handles of wheelchairs (wheelchair movers) and beds (bed movers). The caregiver simply guides the direction of movement.

**Motorized transport device:** Battery-powered or motorized devices that caregivers use to help move patients from one location to another. Include: Motorized bed, stretcher, wheelchair, and transport chair and motorized bed and wheelchair movers.

**Obesity:** A condition characterized by an excessive amount of body fat that presents a risk to a person's health; a person having a BMI 30-39.9.

**One-way slide cushion:** These cushions are made of special slip-resistant materials and are placed under seated patients to prevent them from slipping down in their chair, wheelchair, etc.

**Overhead lifts:** Lifting equipment designed for patients who require moderate to maximum/extensive assistance. With this type of lift, the motor that lifts the patient is attached to a track or rail suspended from the ceiling (Ceiling-mounted Lift), attached to the wall (Wall-mounted Lift), or to a free-standing, mobile structure (Gantry Lift). A strap connected to a hanger bar extends from the motor and functions to raise or lower, move, or support the patient. Slings are attached to the hanger bar. Lifts require the use of a variety of slings that provide specific support or movement for patient handling tasks. Overhead lifts



can move the patient horizontally from one destination point to another within a room, or from room to room i.e., patient room to/from bathroom.

**Pannus:** A pannus, panniculus, or abdominal apron is comprised of excess skin and tissue at the bottom of the abdomen as a result of unequal weight distribution in morbidly obese/bariatric persons.

**Pannus Sling:** A specialized sling designed to lift the pannus in order to gain access to body tissues and areas underneath the pannus.



**Patient:** A healthcare recipient; also referred to as a client or resident.

**Patient handling aids:** Specially designed, non-powered technology used to assist in the transfer or mobilization process. Examples include non-powered standing aids, seated transfer aids, bed rope ladders, bed rails, bed transfer pole, sliding board/device and friction-reducing devices.

**Person of size:** A description of a person who is larger in size by height, weight, body width, and/or body proportions; a morbidly obese, bariatric or very tall person.

**Personal Assistive Devices:** These allow patients to independently transfer and/or mobilize themselves and include mobility aids such as walkers, canes, and crutches, seated transfer aids, and others.

**Repositioning aids:** Specially designed technology that provides assistance in positioning, turning, or moving patients up toward the head of the bed and upright in chairs. Examples

are the repositioning pole, trapeze, bed rail, and friction reducing devices. Lift slings are often used as repositioning aids as well.



**Repositioning/Positioning:** Adjusting a patient's position in bed or chair to prevent pressure ulcers, promote comfort, accommodate physiological functioning, or rise to eye level to facilitate communication.

**Repositioning sling:** Used to bring a patient up to the head of the bed or to laterally rotate the patient for wound care or to prevent pressure ulcer development. See Sling or Repositioning Aids definitions.

**Safe Patient Handling and Mobility (SPHM):** Evidenced-based principles and techniques for safely handling, moving, and mobilizing patients.

**Seated Transfer Aid:** A patient handling aid (sliding board, repositioning pole) used to assist patients in self-transfers, i.e., from the bed to a wheelchair or vehicle to wheelchair.



**Shearing Forces:** Shearing forces occur when two surfaces rub across one another, i.e., a bed surface and the skin of a patient. In healthcare, shearing forces cause injuries (pressure ulcers) to patients, so it is important to diminish these forces as much as possible with the use of patient handling assistive devices. Avoid shearing forces especially for patients with delicate skin or pressure ulcers, such as the aged and spinal cord injury patients

**Shower/Bathing Trolley:** Flat rolling device used for showering or bathing a patient in a supine position. Patient is laterally transferred onto the trolley then rolled into the bathing area for a shower/bath while in the trolley.

**(Non-Powered) Shower chair:** A shower chair that provides no assistance to caregivers and requires manual handling of patients while in the chair.

**(Powered) Shower chair:** Some powered commode/shower chairs are height and longitudinally adjustable in order to place a patient in the best position for patient comfort and caregiver safety and ease in personal care. Others are powered but have fewer assistive features.



**Slide Board:** These act as a supporting bridge when slide transfers are performed for example, from bed to chair or car to wheelchair. These are often used to facilitate independent transfers but may also be used in assisted transfers as well.

**Sling:** Specially designed technology comprised of a variety of fabrics used with lifting devices to temporarily lift or suspend a patient or body part to perform specific patient handling tasks. Sling styles include seated, standing, ambulation, repositioning, turning, pannus holder, limb support/strap, supine, toileting, hygiene, bathing, and others.



**Seated Sling with Head Support**



**Standing Sling**



**Ambulation Sling**



**Repositioning/Turning Sling**



**Limb Support/ Strap**



**Supine Sling**

**(Non-powered) Standing aid:** These are suitable for patients who may need some assistance ambulating but not all of the features of a powered standing assist device. These standing aids provide support for patients to lift themselves to a standing position and back down to a seated position. They also provide a fold-down seat, if needed during a move or transfer. After a patient is positioned properly, a caregiver manually pushes the patient to the desired destination. Patients must have some upper body strength, cognitive ability, weight-bearing capability, balance, and the ability to grasp with at least one hand.



**(Powered) Standing assist device/Sit-to-Stand lift:** This is a powered device that raises and lowers a patient from/to a seated position using a sling that wraps around the back of the patient. They have many uses other than transfers, such as toileting, diapering, changing clothes, and others. In order to use these devices, the patient must have some upper body strength, cognitive ability, weight-bearing capability, and the ability to grasp with at least one hand.



**(Powered) Standing assist device with ambulation capacity:** This is the standing assist device (above) but with added features that allow the footplate and knee plate to be removed in order for the patient to ambulate behind the device. A different sling is used when ambulating a patient than when lifting them. When used as an ambulation aid, patients must also have ability to balance and place one foot in front of the other.



**Stretcher that converts into a Chair:** See Transfer Chair.

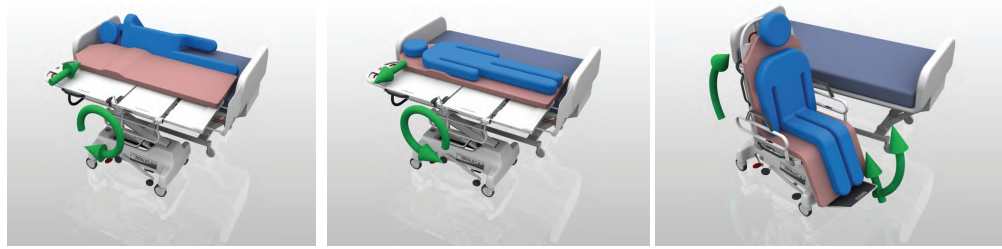
**Technology:** The term adopted by the ANA in the 2013 SPHM Interprofessional National Standards to describe, equipment, devices, aids and resources designed as an alternative to manual handling.

**(Powered) Toilet lifting aid/seal:** This device assists patients in sitting and rising from the toilet.



**Transfer:** The movement of a patient from one place to another, for instance, from a wheelchair to a toilet (vertical transfer) or from a bed to a stretcher (lateral or horizontal transfer).

**Transfer chair:** These convert from chair to stretcher and facilitate transfer from bed (supine position) into chair (seated position).



**Transport device:** Any piece of equipment or device whose purpose is to move a patient from one location to another, i.e., wheelchair, stretcher, bed, gurney, transport chair, etc. Motorized transport devices are preferred.

**Trendelenburg position:** Body position in which the feet of the patient are higher than the head of the patient while in a supine position. For a patient who has slid down in their bed, this facilitates moving the patient upwards toward the head of the bed.

**Wall-mounted lifts:** A type of Overhead Lift designed for patients who require moderate to maximum/extensive assistance. With this type of lift, the motor that lifts the patient is attached to a track or rail attached to the wall.

**Weight capacity:** The amount of weight a support surface (grab bar, hand rail) or piece of equipment (lift, bed, stretcher) can safely carry based on the manufacturer's recommendations.

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